

AYURVEDIC MANAGEMENT OF *SHWITRA* (VITILIGO) - A CASE STUDY*¹Dr. Bharat Singh, ²Prof. Dr. HML Meena, ³Dr. Rashmi Mutha¹PG Scholar, Department of Kayachikitsa, National institute of Ayurveda, Jaipur.²Professor and Head, Department of Kayachikitsa, National Institute of Ayurveda, Jaipur.³Assistant Professor, Department of Kayachikitsa National Institute of Ayurveda Jaipur.

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ABSTRACT

Introduction: Vitiligo, known as *Shwitra* in Ayurveda, is an acquired depigmentary disorder characterized by circumscribed hypopigmented macules resulting from selective destruction or dysfunction of melanocytes. It is considered an autoimmune condition in modern dermatology, while Ayurveda classifies *Shwitra* under *Kushtha Roga*, caused by the vitiation of *Tridosha* and impairment of *Rakta*, *Mamsa*, and *Meda Dhatus*. Although not life-threatening, *Shwitra* has a significant psychosocial impact due to cosmetic disfigurement. Ayurvedic management aims to restore *Dosha-Dhatu Samyata* and promote repigmentation through internal and external therapeutic modalities. **Methodology:** A 24-year-old female presented with a well-defined depigmented patch measuring approximately 5×4 cm over the frontal scalp and forehead region, persistent for two years. The lesion was non-scaly, non-itchy, and associated with leucotrichia. Based on clinical and

classical features, the case was diagnosed as *Shwitra* (correlating with Vitiligo vulgaris). The patient was treated with *Shamana Chikitsa* comprising internal medications and local applications tailored according to *Dosha-Dhatu* involvement. The progress was monitored through serial clinical and photographic assessments. **Result and Discussion:** Significant perifollicular repigmentation and reduction in the depigmented area were observed after *Shamana Chikitsa*, with partial reversal of leucotrichia. The therapeutic response suggests enhanced melanocyte regeneration and restoration of pigment metabolism. The findings

indicate that *Shamana Chikitsa* may modulate underlying autoimmune and metabolic factors through correction of *Dosha-Dhatu Samyata*. **Conclusion:** The observed improvement supports the efficacy and safety of Ayurvedic *Shamana Chikitsa* in promoting repigmentation and improving the cosmetic and psychological outcomes in *Shwitra* (Vitiligo). This case highlights the potential of Ayurveda as a holistic, non-invasive, and sustainable approach to vitiligo management.

KEYWORDS: Vitiligo, *Shwitra*, Ayurvedic therapy, *Shamana Chikitsa*, Autoimmune skin disease.

INTRODUCTION

Vitiligo, also known as leucoderma, is a chronic acquired depigmenting disorder characterized by well-demarcated, non-scaly, hypopigmented macules resulting from selective loss or dysfunction of melanocytes. It affects approximately 0.5–2% of the global population, with onset frequently occurring before 18 years of age and a significant psychosocial impact due to cosmetic disfigurement.^[1] The etiology of vitiligo is multifactorial, involving genetic predisposition, environmental triggers, oxidative stress, metabolic abnormalities, and cell-mediated autoimmune destruction of melanocytes.^[1,2] Clinically, vitiligo presents in generalized symmetric patterns affecting hands, wrists, feet, knees, neck, and periorificial areas, while segmental vitiligo is limited to specific regions and shows sharply demarcated lesions.^[1,2]

In Ayurveda, vitiligo is described as *Shwitra*, classified under *Kushtha Roga*. Classical texts, including *Charaka Samhita*, *Sushruta Samhita*, and Vagbhata's *Ashtanga Hridaya*, describe *Shwitra* using terms such as *Shweta Kushtha*, *Kilasa*, and *Palita*, highlighting the appearance of white patches on the skin.^[3–5] The disease is attributed to vitiation of *Tridoshas* (*Vata*, *Pitta*, *Kapha*) and impairment of *Dhatus* (*Rakta*, *Mamsa*, *Meda*), with distinct types based on Dosha predominance—When *Vāta Doṣa* affects the *Rakta Dhātu*, the patches are *aruna* (reddish) in colour and *rukṣha* (dry) in nature, representing *Vātaja Shwitra*. In *Pittaja Shwitra*, where *Pitta doṣa* vitiates the *Māṃsa Dhātu*, the lesions appear *tāmra* (coppery) with *dāha* (burning sensation) and *romavidhwanshi* (loss of hairs). In *Kaphaja Shwitra*, resulting from *Kapha doṣa* involvement of the *Meda Dhātu*, the lesions are *shveta* (white), *ghana*, and associated with *kandu* (itching).^[5] Ayurvedic texts also recognize dietary, lifestyle, and metabolic factors, such as *Viruddha Ahara*, as contributing to its pathogenesis.^[3,4]

Understanding vitiligo through both modern and Ayurvedic perspectives provides a holistic framework for exploring its pathophysiology and therapeutic strategies, highlighting the importance of integrated approaches for managing pigmentation disorders.

CASE PRESENTATION

A 24-year-old female presented with a well-defined depigmented patch measuring approximately 8×4 cm over the forehead and frontal scalp region since 2 years. The lesion initially appeared as a small patch on the forehead and gradually increased in size. The patient reported regular application of *sindoor*, as per Indian marital customs. There were no associated symptoms such as itching, pain, burning, or systemic complaints. She had no prior history of similar lesions and had not received any medical or Ayurvedic treatment for this condition.

Personal History

- Occupation: Housewife
- Diet: Vegetarian
- Appetite: Normal
- Bowel habits: Regular, once daily
- Sleep: Sound
- No known allergies

Past History

- No history of similar skin complaints prior to onset of this lesion.
- No history of chronic illness, major surgery, or hospitalizations.

Family History

- No significant family history; all family members reportedly in good health.

History of Previous Treatment

- No history of any medical or Ayurvedic treatment for this condition prior to attending the OPD.

MATERIAL AND METHODS

Assessment Tools

The assessment was done based on the Assessment Score Chart (ASC) and Vitiligo Area Scoring Index (VASI) to evaluate the extent and response to therapy.

- ASC assessed parameters such as type, site, number of patches, hair color, margins, patch color, and degree of repigmentation before and after treatment.
- VASI was calculated by estimating the body surface area (BSA) involvement and the degree of depigmentation. The formula used was:

The **formula** used is.

$$\text{VASI} = \sum (\text{Hand units} \times \text{Residual depigmentation})$$

Where.

- **Hand unit:** The patient's palm (including fingers) \approx 1% of total body surface area (BSA).
- **Residual depigmentation:** Degree of depigmentation in the lesion, assessed visually and categorized as 100%, 90%, 75%, 50%, 25%, or 10%.

Table: VASI Score – Degree of Depigmentation.

Degree of Depigmentation	Residual Depigmentation
100%	Complete depigmentation, no pigment
90%	Specks of pigment present
75%	Depigmentation exceeds pigmentation
50%	Depigmentation and pigmentation equal
25%	Pigmentation exceeds depigmentation
10%	Only specks of depigmentation

Table 1: Assessment Score Chart (ASC)^[6]: Assessment of case was done on the basis of ASC.

Parameter	Score 0	Score 1	Score 2	Score 3
Type	No improvement	Stationary	Resistant	Progressive
Site of the lesion	—	Follicular	Mucosal	Acral
Number of patches	Absent	Single patch	Segmentary	Generalized
Hair in patch	Black	Mild black	White	—
Margins of patch	Normal	Inflamed	—	—
Color of patches	Normal	Pigment spot on patch	Pink	Milky white
Re-pigmentation	Fully pigmented	Perifollicular pigmentation	Hyper-pigmentation of margin	No pigmentation

Treatment plan

Table: Treatment Plan – Vitiligo Case.

Date	Medicine / Intervention	Dose & Route	Timing
17/06/2025	Bakuchi Churna + Rasamanikya + Guduchi Satva + Suddha Gandhak	2 g + 250 mg + 500 mg + 500 mg, oral	BD, before meal
	Swayambhu Guggulu	2 tablets, oral	BD, after meal
	Khadirarishta	20 ml, oral	BD, after meal
	Tolinorm Cream	Apply topically	Once daily, morning
	Guduchi Sadhit Jal	As required, oral	Throughout the day

Date	Medicine / Intervention	Dose & Route	Timing
08/07/2025	Bakuchi Churna + Amalaki Churna + Rasamanikya + Guduchi Satva + Suddha Gandhak	2 g + 2 g + 100 mg + 500 mg + 250 mg, oral	BD, before meal
	Shashilekha Vati	2 tablets, oral	BD, after meal
	Khadirarishta	20 ml, oral	BD, after meal
	Tolinorm Cream	Apply topically	Once daily, morning
	Guduchi Sadhit Jal	As required, oral	Throughout the day
29/07/2025	CST for next 1 month		

RESULTS

Table 2: Assessment Score Chart (ASC) – Before and After Treatment.

Parameter	Score Criteria	Before Treatment	After Treatment	Interpretation / Remarks
Type	0 = No improvement 1 = Stationary 2 = Resistant 3 = Progressive	3 – Progressive (gradually increasing previously)	1 – Stationary (no further spread, stable)	Disease activity controlled
Site of the Lesion	1 = Follicular 2 = Mucosal 3 = Acral	1 – Follicular (forehead, hair-bearing region)	1 – Follicular	Same site
Number of Patches	0 = Absent 1 = Single patch 2 = Segmentary 3 = Generalized	1 – Single patch	1 – Single patch	No new lesions developed
Hair in Patch	0 = Black 1 = Mild black 2 = White	2 – White (depigmented hairs)	1 – Mild black (partial hair repigmentation)	Follicular repigmentation seen
Margins of Patch	0 = Normal 1 = Inflamed	0 – Normal	0 – Normal	Stable, non-inflamed borders
Color of Patch	0 = Normal 1 = Pigment spot on patch 2 = Pink 3 = Milky white	3 – Milky white	1 – Pigment spot on patch	Repigmentation spots appeared
Re-pigmentation	0 = Fully pigmented 1 = Perifollicular pigmentation 2 = Hyperpigmentation of margin 3 = No pigmentation	3 – No pigmentation	1 – Perifollicular pigmentation	Evident perifollicular repigmentation

Total ASC Score

- Before treatment: 13 / 21
- After treatment: 5 / 21

Interpretation: Reduction in ASC score demonstrates marked clinical improvement and disease stabilization.

VASI Assessment Table – Forehead Vitiligo Lesion

Parameter	Before Treatment	After Treatment	Change/Improvement
Location	Forehead + frontal hairline	Forehead + frontal hairline	Same site
Lesion Area (Hand units)	~1.0 hand unit (≈1% BSA)	~1.0 hand unit (≈1% BSA)	No major change in size
Depigmentation (%)	~90% (almost complete depigmentation)	~60–70% (perifollicular & patchy repigmentation seen)	↓ 20–30%
Localized VASI Score	$1.0 \times 90\% = 0.9$	$1.0 \times 65\% = 0.65$	Improvement ≈ 0.25 points (≈27–30% repigmentation)
Clinical Observation	Chalk-white patch, sharply demarcated, minimal pigment	Perifollicular pigmentation + pigment islands, less sharp margins	Evidence of repigmentation & disease stability

VASI Comparison

- **Before:** Area ~1 hand unit \times 90% depigmentation \rightarrow **VASI \approx 0.9**
- **After:** Area ~1 hand unit \times 65% depigmentation \rightarrow **VASI \approx 0.65**

Improvement in VASI = 0.25 points (≈ 27–30% repigmentation).

Before treatment

29/07/2025



02/09/25



DISCUSSION

In this case, the patient presented with a single depigmented patch on the forehead extending to the frontal scalp. After 42 days of Shamana therapy, the sharply demarcated white patch developed a pinkish hue with irregular margins, and early perifollicular repigmentation was observed. With continued treatment over approximately 2.5 months, marked improvement occurred, evidenced by the appearance of pigment islands within the lesion, reduction in patch margins, and partial repigmentation of previously white hairs to mild black. These changes were quantitatively supported by a decrease in the VASI score from 0.9 to 0.65 and a reduction in the ASC score from 13 to 5, reflecting significant repigmentation, stabilization of the lesion, and early hair color recovery, indicating a favorable therapeutic response.

Bakuchi Churna contains active compounds such as corylin, psoralen, isopsoralen, bakuchiol, bavchinin, and bavachin. These constituents exhibit antioxidant activity, stimulate melanocytes to enhance melanin production, modulate the immune system, and inhibit antigen-induced granulation.^[7] *Amalaki* possesses antioxidant and astringent properties, making it beneficial for maintaining healthy skin.^[8] The main component of *Gandhaka Rasayana* is *Shuddha Gandhak* (purified sulfur), which has multiple therapeutic effects on the skin. It is known to be *Kushtaghna* (effective against skin disorders), *Twachya* (promotes skin health), and *Rakta-Shodhaka* (purifies the blood). *Tinospora cordifolia* (*Guduchi*) acts as a potent immunomodulator, enhancing both innate and adaptive immunity. Its antioxidant and anti-inflammatory properties help protect melanocytes and support repigmentation in vitiligo. Additionally, *Guduchi* may aid in regulating autoimmune responses implicated in vitiligo.

pathogenesis.^[9] *Rasamanikya*, an Ayurvedic formulation with ruby-like properties, is used to manage skin disorders including leukoderma, rashes, and wounds. It acts as a blood purifier (Raktashodhak), soothes itching, enhances immunity, and supports skin health. Additionally, it helps restore skin complexion, maintain skin integrity, and balance Doshas.^[10] *Khadira*, commonly used in *Switra* formulations, possesses anti-inflammatory and immunomodulatory properties. Its heartwood contains catechins, rutin, and isorhamnetin, which act as antioxidants by scavenging free radicals. Orally, *Khadira* may help reduce vitiligo disease activity.^[11] *Swayambhu Guggulu*, containing *Bakuchi*, is mentioned in *Bhavaprakasha* under *Kustha Rogadhikar* and is indicated for the management of *Switra*.^[12] *Shashilekha Vati*, described by Acharya *Yogarajnanaka* for managing *Shvitra*, contains *Shuddha Parada*, *Shuddha Gandhaka*, *Shuddha Tamra*, and *Bakuchi Kashaya*.^[13] *Parada* acts as a catalyst, while *Gandhaka*, due to its *tikshna* and *sukshma* properties with *ushna virya*, effectively clears *srotas* and treats skin disorders. *Bakuchi* (*Psoralea corylifolia* Linn.) contributes antibacterial, antifungal, anti-inflammatory, antioxidant, and immunomodulatory effects.^[14] Tolenorm ointment directly stimulates melanogenesis in melanocytes, derived from ectodermal neural crest cells, enhancing the process at both pre- and post-transcriptional levels, as demonstrated by mRNA analysis, Western blot, and immunoprecipitation studies.^[15]

CONCLUSION

In this case of localized vitiligo (*Śvitra*) involving the forehead and scalp, significant repigmentation was achieved through *Shamana Chikitsa* alone, without any adverse effects. The combination of internal medications such as *Bakuchi Churna*, *Guduchi Satva*, *Amalaki Churna*, *Suddha Gandhaka*, *Rasamanikya*, *Shashilekha Vati*, and *Khadirarishta*, along with external application of Tolenorm ointment and controlled sunlight exposure, effectively stimulated melanogenesis and restored normal skin color. Although *Shodhana Chikitsa* was not employed, the results highlight the efficacy of well-selected *Shamana* therapy in early or localized cases. However, for chronic or extensive vitiligo, incorporating *Shodhana chikitsa* may further enhance therapeutic outcomes by removing deep-seated doshas and preventing recurrence.

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